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EXAMINER ZIMMERMANN, JOHN P				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/557,019

Applicant(s)

ROCHFORD ET AL.

Examiner

John P. Zimmermann

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF-08)
- Paper No(s)/Mail Date 13NOV06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 11-12** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Mori et al.** (US 2001/0024354 A1).

As related to independent **claim 11**, and dependent **claim 12**, Mori et al. teaches a printer chassis [i.e. electronic appliance housing-case] manufactured from a disposable and biodegradable material (Mori et al. – Title; Abstract; Summary, Page 2, Paragraphs 16-19) wherein the chassis is manufactured from pulp fiber (Mori et al. - Summary, Paragraph 18).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

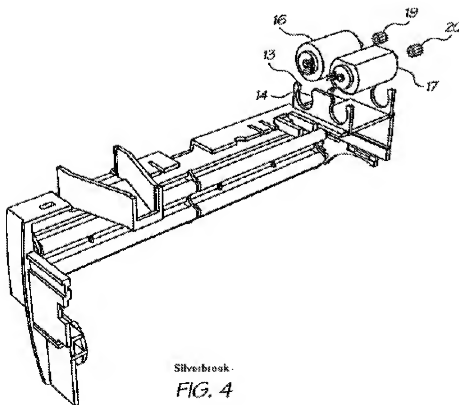
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 1-2, 4, & 7-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Silverbrook** (US 7,006,143 B1) in view of **Mori et al.** (US 2001/0024354 A1).

- a. As related to independent **claim 1**, Silverbrook teaches a package of paper comprising a container manufactured from a disposable and biodegradable material [i.e. paper jacket] with at least one sheet of paper [i.e. supply of print media] (Silverbrook – Title; Abstract; Summary, Column 1, Lines 66-67; and Description, Column 3, Lines 16-18). Silverbrook continues to teach the container comprises mounting means for allowing a releasable attachment [i.e. snap fitted] to the container of one or more

electrical components [i.e. electric motors, ink supply mechanism, etc.] for printing onto a sheet of paper stored within the container interior and a portion of the container is movable relative to the remainder of the container [i.e. two shells bonded or clipped together] so as to open an access aperture providing access to the container interior so as to allow for attachment of a component by use of the mounting means (Silverbrook – Title; Abstract; Summary, Column 2, Lines 1-20; Description, Column 3, Lines 15-65; and Figure 4, Reference #13, #14, #16, & #17, shown below).



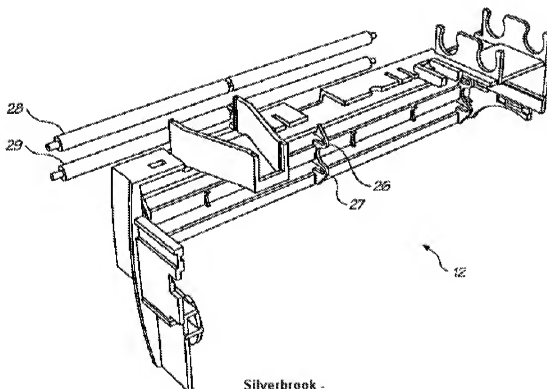
Continuing with **claim 1**, while Silverbrook teaches the limitations listed above, Mori et al. expands on the potential materials used to manufacture the container to specifically state a biodegradable material, wherein the container comprises mounting means for allowing a releasable attachment to the container of one or more electrical components

[i.e. Main Unit] and having a portion of the container movable relative to the remainder of the container (Mori et al. – Title; Abstract; and Summary, Page 2, Paragraphs 18-19).

Given the same field of endeavor, specifically an electronic appliance having a housing-case made of biodegradable and/or disposable material, it is apparent that one of ordinary skill in the art at the time the invention was made would have been motivated to combine the package of paper comprising a container with the function of containing electrical components for printing as taught by Silverbrook with the specific housing-case made of biodegradable material and container made of the same as taught by Mori et al., in an effort to provide an appliance with durability sufficient for practical use without causing environmental impact (Mori et al. - Abstract).

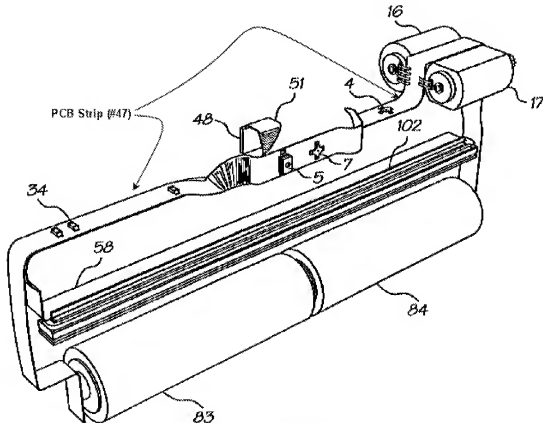
- b. As related to dependent **claim 2**, the combination of Silverbrook and Mori et al. remains as applied to **claim 1** above and continues to teach the container is manufactured from pulp fiber (Mori et al. - Summary, Page 2, Paragraph 18).
- c. As related to dependent **claim 4**, the combination of Silverbrook and Mori et al. remains as applied to **claim 1** above and continues to teach the outer surface of the container is covered in a waterproofing material [i.e. plastic jacket] (Silverbrook – Description, Column 3, Lines 15-18).
- d. As related to dependent **claim 7**, the combination of Silverbrook and Mori et al. remains as applied to **claim 1** above and continues to teach the mounting means comprises a resilient snap lock clip [i.e. snap fitted or a snap fit via clips] (Silverbrook – Description, Column 3, Lines 38-40 & Column 4, Line 28, and Figure 4, Reference #13 & #14, shown previously).

- e. As related to dependent **claim 8**, the combination of Silverbrook and Mori et al. remains as applied to **claim 1** above and continues to teach the mounting means comprises means for mounting a motor to the container (Silverbrook – Description, Column 3, Lines 38-40 and Figure 4, Reference #13, #14, #16, & #17 shown previously).
- f. As related to further dependent **claim 9**, the combination of Silverbrook and Mori et al. remains as applied to **claim 8** above and continues to teach the means for mounting a motor comprises a rail slider upon which a motor may be located and slid into a use position (Silverbrook – Description, Column 3, Lines 38-40; Figure 3, shown below and Figure 4, Reference #13, #14, #16, #17 and rail, shown previously).



Silverbrook -
FIG. 3

g. As related to dependent **claim 10**, the combination of Silverbrook and Mori et al. remains as applied to **claim 1** above and continues to teach an electrical connector mounted on the container so as to receive and electrically connect with a further electrical connector mounted on a motor housing located in a use position relative to the container (Silverbrook – Description, Column 3, Lines 38-40 & Column 3, Line 60 – Column 4, Line 8; Figure 4, Reference #16, & #17 shown previously; and Figure 21, Reference #16, #17, and PCB Strip #47, shown below).



Silverbrook -
FIG. 21

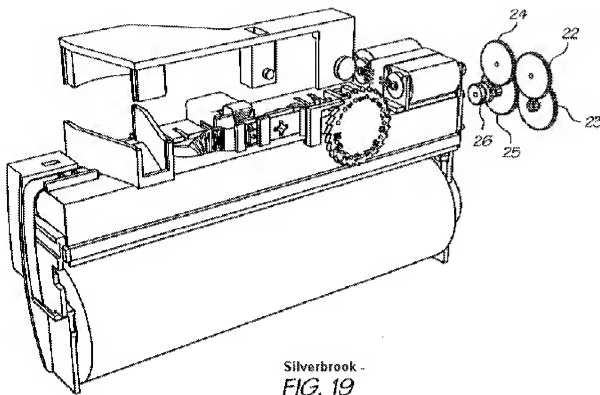
8. **Claims 14, 17, & 19-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mori et al.** (US 2001/0024354 A1) in view of **Silverbrook** (US 7,006,143 B1).

- a. As related to dependent **claim 14**, Mori et al. teaches the limitations of **claim 11**, for the reasons above and while Mori et al. continues to teach the outer surface of the chassis is made of a resin and other materials (Mori et al. – Summary, Page 2, Paragraphs 16-24), Mori et al. *does not* specifically teach the outer surface is covered in a waterproofing material. *However*, Silverbrook teaches a printer chassis manufactured from a disposable and biodegradable material (Silverbrook – Title; Abstract; Summary, Column 1, Lines 66-67; and Description, Column 3, Lines 16-18) and an outer surface of the chassis is covered in a waterproofing material [i.e. plastic jacket] (Silverbrook – Description, Column 3, Lines 15-18).
- b. As related to dependent **claim 31**, Mori et al. teaches the limitations of **claim 11**, for the reasons above and while Mori et al. continues to teach a biodegradable container that comprises mounting means for allowing a releasable attachment to the container of one or more electrical components [i.e. Main Unit] and having a portion of the container movable relative to the remainder of the container (Mori et al. – Title; Abstract; and Summary, Page 2, Paragraphs 18-19), Mori et al. *does not* specifically teach the container comprising the chassis is a printer. *However*, Silverbrook teaches a printer chassis manufactured from a disposable and biodegradable material (Silverbrook – Title; Abstract; Summary, Column 1, Lines 66-67; and Description, Column 3, Lines 16-18).

Given the same field of endeavor, specifically an electronic appliance having a housing-case made of biodegradable and/or disposable material, it is apparent that one of ordinary skill in the art at the time the invention was made would have been motivated to combine the printer chassis manufactured from a disposable and biodegradable material as taught by Mori et al. with the specific outer surface of the chassis covered in a waterproofing

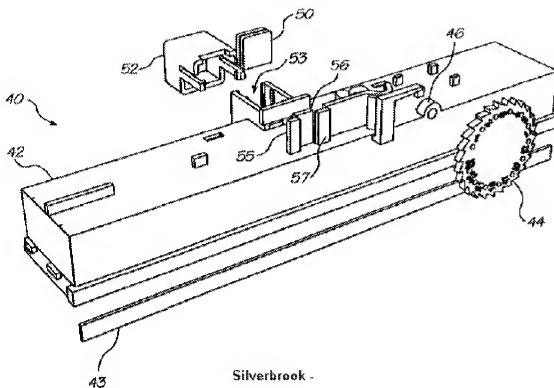
material as taught by Silverbrook, in an effort to provide an appliance with durability sufficient for practical use without causing environmental impact (Mori et al. - Abstract).

- c. As related to further dependent **claim 17**, the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach the waterproofing material is bonded to the chassis (Silverbrook – Description, Column 50, Claim 2).
- d. As related to further dependent **claims 19 & 20**, the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach a means for releasably [i.e. snap fitted] mounting (securing) on the chassis a motor for driving relative movement between a printer head and paper to be printed (Silverbrook – Description, Column 3, Lines 37-55; Figure 4, Reference #16 & #17, shown previously; and Figure 19, Reference #24 - #26, shown below).



- e. As related to further dependent **claims 21**, the combination of Mori et al. and Silverbrook remains as applied to **claim 20** above and continues to teach the releasable securing means comprises a resilient snap lock clip [i.e. snap fitted or a snap fit via clips] (Silverbrook – Description, Column 3, Lines 38-40 & Column 4, Line 28, and Figure 4, Reference #13 & #14, shown previously).
- f. As related to further dependent **claims 22**, the combination of Mori et al. and Silverbrook remains as applied to **claim 19** above and continues to teach the means for mounting a motor comprises a rail slider upon which a motor may be located and slid into a use position (Silverbrook – Description, Column 3, Lines 38-40; Figure 3 and Figure 4, Reference #13, #14, #16, #17, & rail, both shown previously).

g. As related to further dependent **claim 23**, the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach an electrical connector mounted on the chassis so as to receive and electrically connect with a further electrical connector mounted on a motor housing located in a use position relative to the chassis (Silverbrook – Description, Column 3, Lines 38-40 & Column 3, Line 60 – Column 4, Line 8; Figure 4, Reference #16, & #17 shown previously; and Figure 21, Reference #16, #17, and PCB Strip #47, shown previously). Additionally, the combination goes on to teach a printer head [i.e. ink supply mechanism including print head] electrically connected to the chassis mounted electrical connector (Silverbrook - Title; Abstract; Description, Column 3, Lines 45-63 and Figure 5, Reference #42, shown below).



Silverbrook -
FIG. 5

- h. As related to further dependent **claims 24 & 25**, the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach a means [i.e. ink supply mechanism] for releasably [i.e. snap fitted] mounting (securing) on the chassis a printer head (Silverbrook - Title; Abstract; Description, Column 3, Lines 45-63 & Column 4, Lines 7-29; and Figure 5, Reference #42, shown above).
- i. As related to further dependent **claim 26**, the combination of Mori et al. and Silverbrook remains as applied to **claim 25** above and continues to teach the releasable securing means comprises a resilient snap lock clip [i.e. snap fitted or a snap fit via clips] (Silverbrook – Description, Column 3, Lines 45-63 & Column 4, Lines 7-29; and Figure 4, Reference #13 & #14, shown previously).

- j. As related to further dependent **claim 27**, the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach the printer chassis further comprises a printer head (Silverbrook - Title; Abstract; Description, Column 3, Lines 45-63 & Column 4, Lines 7-29; and Figure 5, Reference #42, shown above).
 - k. As related to further dependent **claim 28**, the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach a means for mounting on the chassis [i.e. the chassis carries] a scanner head [i.e. image sensor and processor] for scanning documents [i.e. images] (Silverbrook – Title & Abstract).
 - l. As related to further dependent **claims 29, 30, & 32** the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach at least one sheet of paper to be printed [i.e. supply of print media], being located within the chassis (Silverbrook – Title & Abstract) and with the print media being a roll of paper that can be printed and cut to customized sizes on demand, the number of sheets of paper would clearly encompass a range of 50 to 150 sheets (Silverbrook – Title; Abstract; Summary, Column 2, Lines 1-20; and Description, Column 3, Lines 12-59). Finally, the combination clearly teaches the previously taught limitations applying to a printer (Silverbrook – Title; Abstract; Summary, Column 1, Lines 59-67; and Description, Column 3, Lines 46-55).
9. **Claims 3, 13, & 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of **Silverbrook** (US 7,006,143 B1) and **Mori et al.** (US 2001/0024354 A1) as applied to **claims 1, 11, & 14** above, and further in view of **Andersen et al.** (US 5,545,450 A).

- a. As related to dependent **claims 3 & 13**, the combination of Silverbrook and Mori et al. remains as applied above and while it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a honeycomb structure for strengthening purposes, as a part of the container when using pulp fibers for the biodegradable material (Mori et al. - Summary, Page 2, Paragraph 18), the combination *does not* specifically call for a honeycomb construction. *However*, Andersen et al. teaches the state of the art of degradable containers prior to and including the time of the invention to include the use of fibers and a honeycomb structure (Andersen et al. – Title; Abstract; Summary, Column 13, Lines 25-55; and Description, Column 43, Lines 45-50).
- b. As related to further dependent **claim 18**, the combination of Mori et al. and Silverbrook remains as applied to **claim 14** above and continues to teach a variety of waterproofing materials, but *does not* specifically teach wax paper. *However*, Andersen et al. teaches the state of the art of degradable containers prior to and including the time of the invention to include the use of fibers, a honeycomb structure, and waterproofing material that includes wax paper (Andersen et al. – Title; Abstract; Summary, Column 13, Lines 25-55; Detailed Description, Column 43, Lines 45-50; and Detailed Description, Column 45, Line 41 – Column 46, Line 51).

Given that which was well known to one of ordinary skill in the art at the time of the invention, including the use of recyclable, degradable materials such as pulp fiber, for the manufacturing of rigid containers, it is apparent that one of ordinary skill in the art at the time the invention was made would have been motivated the electronic appliance [i.e. printer] having a housing-case made of biodegradable and/or disposable material as taught by the combination of Silverbrook and Mori et al. with the specific use of a

honeycomb structure and wax paper as taught by Andersen et al. in an effort to provide an appliance with durability sufficient for practical use without causing environmental impact (Mori et al. – Abstract and) while being competitive with articles made of plastic, polystyrene, or metal (Andersen et al. - Detailed Description, Column 17, Lines 29-39).

10. **Claims 5 & 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of **Silverbrook** (US 7,006,143 B1) and **Mori et al.** (US 2001/0024354 A1) as applied to **claims 4 & 14** above, and further in view of **NPL-FujiFilm** (Waterproof Camera – Available for sale, July 4th, 2000).

The combination of Silverbrook and Mori et al. remains as applied above and while it would have been obvious to one of ordinary skill in the art at the time of the invention to ensure the waterproofing material completely encapsulated the container, the combination *does not* specifically mention complete encapsulation. *However*, as shown in the Non Patent Literature (NPL) of FujiFilm depicting a disposable electronic appliance similar to the disposable camera of Silverbrook, The electronic appliance of NPL-FujiFilm is waterproof to a depth of 17 feet and clearly shows complete encapsulation. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the characteristics of the disposable, biodegradable appliance container as taught by Silverbrook and Mori et al. with the waterproof characteristics of NPL-FujiFilm in an effort to ensure no water damage could occur to the electronic appliance.

11. **Claims 6 & 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of **Silverbrook** (US 7,006,143 B1) and **Mori et al.** (US 2001/0024354 A1) and

NPL-FujiFilm (Waterproof Camera – Available for Sale, July 4th, 2000) as applied to **claims 5 & 15** above, and further in view of **Martin et al.** (US 4,778,059 A).

The combination of Silverbrook, Mori et al., and NPL-FujiFilm remains as applied above and while it would have been obvious to one of ordinary skill in the art at the time of the invention to offer a line of weakness to provide a portion of the container movable relative to the remainder of the container [i.e. separation of two shells] the combination *does not* specifically mention a line of weakness or a perforation. *However*, Martin et al. teaches the state of the art of degradable containers prior to and including the time of the invention to include the use of pulp fibers [i.e. cardboard] and gives many examples of the use of a line of perforations in the waterproof material along the path of separation so as to provide a portion of the container movable relative to the remainder of the container (Martin et al. – Background, Column 1, Line 30 – Column 2, Line 66). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the characteristics of the disposable, biodegradable, waterproof appliance container as taught by Silverbrook, Mori et al., and NPL-FujiFilm with the use of a line of perforation as was commonly used in the art at the time of the invention and was further iterated by Martin et al. in an effort to ensure no water damage could occur to the electronic appliance, but the interior could be reached in an easy manner without the risk of damage or injury during the process (Martin et al. – Background, Column 1, lines 13-25).

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hartman (US 2,859,897 A) teaches perforation line of weakness in a container.

Michelman et al. (US 2003/0003285 A1) teaches a container built using corrugated paperboard and pulp and waterproofing it. Silverbrook (US 6,876,394 A) teaches a recyclable, disposable, print on demand electronic appliance.

13. ***Examiner's Note:*** Examiner has cited particular Figures & Reference Numbers, Columns, Paragraphs and Line Numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Zimmermann whose telephone number is (571)270-3049. The examiner can normally be reached on Monday - Thursday, 7:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JPZ

/Hai C Pham/
Primary Examiner, Art Unit 2861
March 15, 2009